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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/606,855

06/26/2003

Yunoh Jung

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11/02/2004

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EXAMINER

MANAHAN, TODD E

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding:

Office Action Summary

Application No.

10/606,855

Applicant(s)

JUNG ET AL.

Examiner

Todd E. Manahan

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2, 4-7, 11, 18, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Garland (United States Patent No. 5,846,076 cited by applicant).

Garland discloses a dental articulating device configured to duplicate at least a portion of a patient's mouth for use in producing a dental prosthesis, the device comprising: a) a pair of trays 16, pivotally coupled together, the trays pivoting with respect to one another between: i) a closed configuration, in which the trays are opposingly spaced-apart from one another; and ii) an open configuration, in which the trays are pivoted away from one another; and b) a hinge, integral with the trays and positioned between the trays, including: i) a pivot axle 46, associated with one of the trays; ii) a shoulder 44, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a single pair of fingers 40, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder. The device further comprises: a pair of arms 37,39, each extending between a different one of the trays and the hinge, and pivotally coupled together by the hinge.

Claims 1, 2, 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson (United States Patent No. 5,406,949 cited by applicant).

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Richardson discloses a dental articulating device configured to duplicate at least a portion of a patient's mouth for use in producing a dental prosthesis, comprising: a) a pair of trays, 14, 16 pivotally coupled together, the trays pivoting with respect to one another between: i) a closed configuration, in which the trays are opposingly spaced-apart from one another; and ii) an open configuration, in which the trays are pivoted away from one another; and b) a hinge, integrally formed with the trays and positioned between the trays, including: i) a pivot axle 52, associated with one of the trays; ii) a shoulder 54, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a single pair of fingers 36, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder.

Claims 11-13, 16-20, 23-25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Walter (United States Patent No. 5,466,152 cited by applicant).

It is noted that in order to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-7, 9, 10, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Garland.

Walter discloses the invention essentially as claimed except for the hinge including i) a pivot axle, associated with one of the trays; ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a pair of fingers, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder.

Garland discloses an articulator having a hinge including i) a pivot axle, associated with one of the trays; ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a pair of fingers, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder. It would have been obvious to one skilled in the art to replace the hinge of the device of Walter with a hinge comprising i) a pivot axle, associated with one of the trays; ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a single pair of fingers, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder in view of Garland in order to make a more secure pivotal connection between the trays will still permitting separation thereof if desired.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Garland as applied to claim 1 above, and further in view of Presswood (United States Patent No. 5,403,185 cited by applicant).

Presswood discloses that it is known in the art to provide an articulator tray with a thin membrane extending across the apertures therein and piercable by a registration pin in order to prevent dental plaster from leaking thru the registration holes in the tray (see col. 4, lines 1-22). It would have been obvious to one skilled in the art to provide the device of the combination Walter as modified by Garland with a thin membrane extending across the registration pin holes in view of Presswood in order to prevent leakage of dental plaster thru the registration holes.

Claims 14, 15, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Presswood.

It would have been obvious to one skilled in the art to provide the method of Walter with the step of pressing registration pins thru a thin membrane placed over the registration holes in view of Presswood in order to prevent leakage of dental plaster thru the registration holes.

Response to Arguments

Applicant's arguments filed 09 August 2004 have been fully considered but they are not persuasive. Applicant has overcome the Double Patenting Rejection of claim 8.

In response to applicant's arguments that Garland and Richardson disclose two pairs of fingers instead of a single pair, the Examiner respectfully disagrees. In figures 5 and 6, it is clear that fingers 40 extend over the upper part of the hinge and there are only two such fingers, one disposed on either side of the shoulder 44. Similarly in figure 4 of Richardson, fingers 36 extend over the upper part of the hinge and there are only two such fingers, one disposed on either side of the shoulder 54.

In response to applicant's arguments regarding the method claims, again it is stressed that to be entitled to weight in method claims, the recited structure limitations therein must affect the

method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. Ex parte Pfeiffer, 1962 C.D. 408 (1961). In the instant case, the recited structure of the hinge, i.e. single pair of fingers, etc., does not affect the articulation method in a manipulative sense. Merely reciting the step of pivoting about the hinge is not deemed to cause the structure of such hinge to affect the articulation method in any manipulative sense.

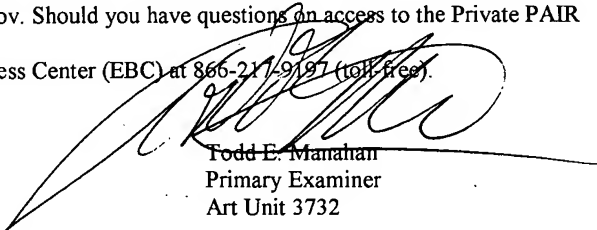
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd E. Manahan whose telephone number is 703 308-2695. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 703 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Todd E. Manahan
Primary Examiner
Art Unit 3732